#### 2013 International Symposium on Extreme Ultraviolet Lithography

Toyama, Japan • 6 - 10 October, 2013



#### **Opening Remarks**

Ichiro Mori, Soichi Inoue EIDEC

**TOYAMA, JAPAN** Oct. **7, 2013** 







# 2013 International Welcome to the Extreme Ultraviolet Lithography 2013 EUVL Symposium! Toyama, Japan • 6 - 10 October, 2013

#### Organized by:



#### In cooperation with:





Symposium Co-Chairs:

Ichiro Mori (EIDEC)
Toshiro Itani (EIDEC)
Kurt Ronse (imec)
Stefan Wurm (SEMATECH)

# 2013 International Welcome to the Extreme Ultraviolet Lithography 2013 EUVL Symposium! Toyama, Japan • 6 - 10 October, 2013

Organized by:



**Program Chair: Program Co-Chairs:** 

In cooperation with:





Soichi Inoue (EIDEC)
Winfried Kaiser (Carl Zeiss SMT)
Patrick Naulleau (LBNL)
Seong-Sue Kim (Samsung)

2013 International Symposium on

#### ExtreThanks to Our Sponsors!

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AGC ASML



























































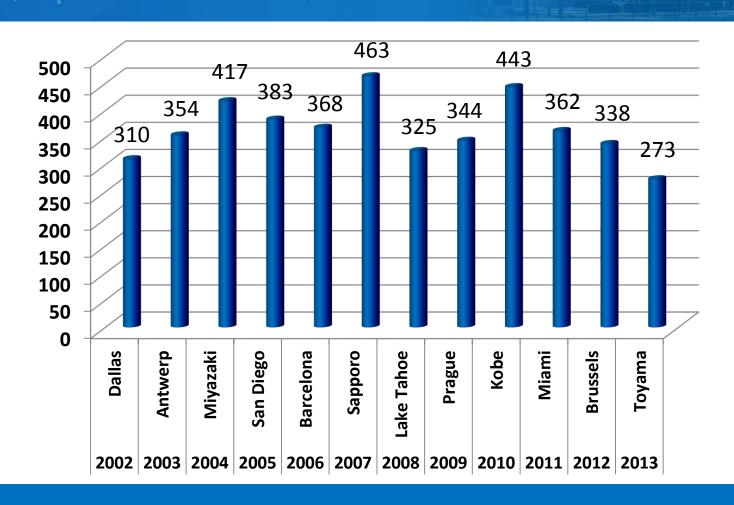




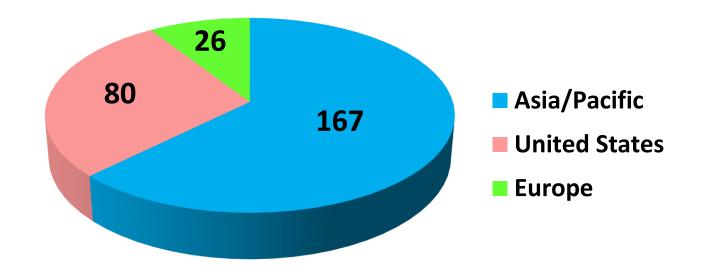




# Attendance 1<sup>st</sup> to 12<sup>th</sup> Symposium Extreme (October 7th, 2013)



### 2013 International Symposium on Extre Attendance by Geographic Region



### 2013 International Symposium on Extreme Ultrehalleinge to Realization

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#### Breaking the Barrier of Technology and Economy for HVM: Extra Efforts in Realizing EUV Lithography

The industry has been moving forward to pilot manufacturing of the **20-16 nm half-pitch** generation using EUVL, but significant challenges still remain.

#### Innovative Approaches for the Next Generation EUV Lithography: High NA Combined with Technologies to Extend EUV Lithography

To meet the challenges of <u>11 nm half-pitch to sub-10 nm feature size imaging</u> with EUVL, the industry needs to explore new innovative, and aggressive approaches.

### 2013 International Symposium on Extreme Ultra Keynote Presentation

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#### **Dr. Anthony Yen**

Director of Nanopatterning Technology Infrastructure Division TSMC

"Semiconductor Manufacturing Using EUV Lithography: Progress and Remaining Challenges"

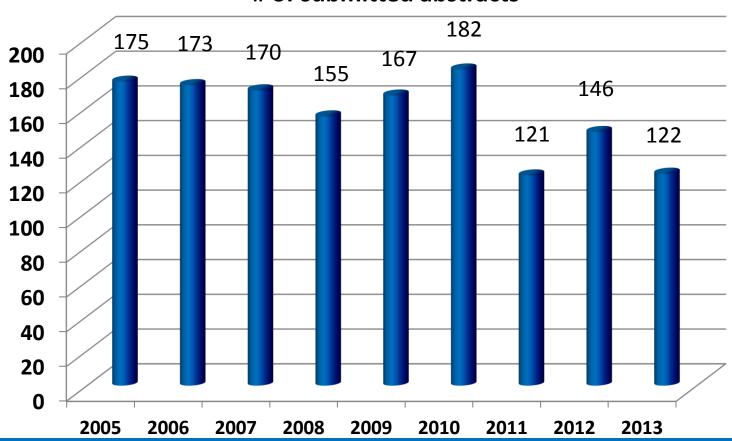
# 2013 International Symposium on Extreme Ultravi Program Overview



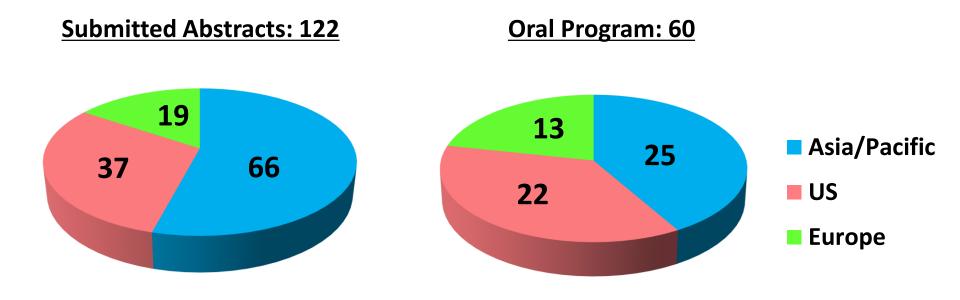
### 2013 International Symposium on Extreme Ultraviolet Contributions

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#### # of submitted abstracts



# 2013 International Symposium on Extreme Ult Contributions by Region



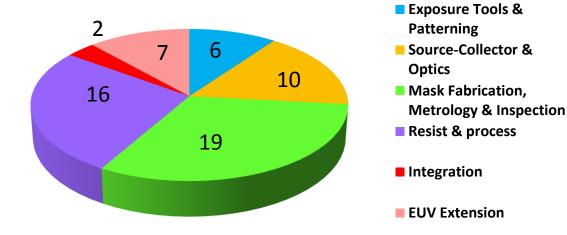
# 2013 International Symposium on Extreme Ultr Contributions by Topic

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#### **Submitted Abstracts: 122**

#### 2 17 9 22 31 41

#### **Oral Program: 60**



### 2013 International Symposium on Extreme Ultraviprogramatya Glance

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| Oct. 7<br>Monday                | Oct.8<br>Tuesday         | Oct.9<br>Wednesday                 | Oct.10<br>Thursday               |
|---------------------------------|--------------------------|------------------------------------|----------------------------------|
| Keynote Presentation            | Source                   | Resist Fundamentals                | Collector & Optics               |
| Exposure Tools & Patterning     | Mask Inspection<br>Tools | Resist Processing                  | Blank Process & Characterization |
| Lunch                           | Lunch                    | Lunch                              | Lunch                            |
| Mask Fabrication                | Networking               | EUV Extension                      | Resist Outgassing/<br>OoB        |
| Resist & Materials              |                          | Mask Metrology & Imaging           |                                  |
| Poster Session<br>6:00pm~8:00pm |                          | Conference Dinner<br>6:10pm~8:30pm |                                  |

For a detailed program, see agenda in your booklets

### 2013 International Symposium on Extreme Ultraviolet Poster Session

- ✓ Monday, October 7 6:00 pm 8:00 pm
- ✓ All posters must be ready by 5:00 pm Monday, October 7.
- ✓ Poster presenters are expected to stay at their poster during the scheduled poster session.
- ✓ The posters can remain up and available for the duration of the conference.
- ✓ We ask you not to take your poster down before the coffee break on <u>Thursday 10:50 am</u>.

### 2013 International Symposium on Extreme Ultravi Conference Dinner

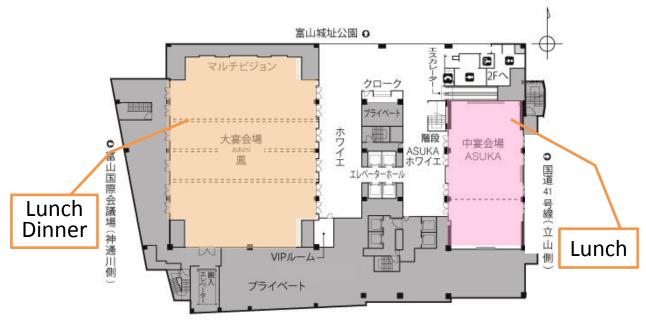
- ✓ Wednesday evening (Oct. 9<sup>th</sup>)
- ✓ Starts at 6:10 pm
- ✓ @ ANA Crowne Plaza Toyama, 3<sup>rd</sup> Floor Banquet Hall "Ohtori"

### 2013 International Symposium on Extreme Ultraviolet Banquet Hall

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#### **ANA Crowne Plaza Toyama**

3<sup>rd</sup> Floor



# 2013 International Symposium on Extreme Ultraviolet Housekeeping

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#### ✓ For audience:

- Please use the audience microphones for your questions
- > Put your cell phones in silent mode
- Taking pictures and recording are strictly prohibited

#### ✓ For presenters:

- > Turn it and check your presentations
- Stick to your allotted presentation time
- ✓ Presentations and posters will be distributed through the SEMATECH website after the symposium
  - Notification will be sent by e-mail to all Symposium attendees

### 2013 International Symposium on Extreme Ultraviolet Lithoversight

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- √ Wednesday, October 9
- ✓ <u>Session 7</u>: Resist Processing
- ✓ Session Chair: Taku Hirayama (TOK), Jan van Schoot (ASML)



✓ Session Chair: Taku Hirayama (TOK), Rudy Peeters (ASML)

#### 2013 EUVL Symposium Support Team Toyama, Japan • 6 - 10 October, 2013



Hotta

**Marcy** 

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# Please Enjoy the Symposium and Toyama!!